The Rufous-vented Chachalaca or Cocrico (*Ortalis ruficauda*) in Tobago, West Indies: A Case Study

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トバゴ(ウエストインディーズ)とトリニダードで飼育されている コクリコ(ワキアカヒメシヤクケイ)の現地調査

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ABSTRACT. The Cocrico (*Ortalis ruficauda*) is one of the two national birds of the Republic of Trinidad and Tobago, W.I.; the other is the Scarlet Ibis (*Eudocimus ruber*). Some observations were made at the Emperor Valley Zoo, where nine birds were kept on exhibit and have been laying and successfully hatching their chicks over a period of three years. In Tobago, five wildlife farmers were interviewed and two out of ten who were sent questionnaires responded. This case study suggested the following: 1] Some people in Tobago were interested and have been rearing the Cocrico in captivity. 2] Almost all these persons also reared other types of wildlife which included agouti; collared peccary; iguana; nine banded armadillos; opossums; ocelot; common tegu; parrots; and Curvier dwarf caimans. 3] Cocrico will lay and incubate eggs on the ground or in prepared nest boxes and this species did not demonstrate seasonality of laying in captivity.

Key Words : *Ortalis ruficauda*, Rufous-vented Chachalaca, rearing in captivity, Tobago West Indies

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INTRODUCTION

Rufus-vented Chachalaca (*Ortalis ruficauda*) [Cocrico in Trinidad and Tobago] is one of the two national birds of the Republic of Trinidad and Tobago [West Indies]. This was done in 1962 when the twin island state received its independence from the United Kingdom. Ten years later the Cocrico and the green parrot (*Amazona* sp.) were accused of being the two most destructive agricultural pests. The birds were normally deep-forest dwellers, but due to a hurricane in 1963, which destroyed most of their food and habitat, the birds came to the forest edge and adapted well to a new environment and multiplied [1].

By 1980 the Wildlife legislation was altered, changing the status of the Rufous-vented Chachalaca from a "protected bird" to a "vermin" [2]. The authorities attempted to deal with the situation in two ways. The first method was to employ "Pest Control Officers", and the second was "to promote captive breeding and rearing".

In spite of the failed attempts of the authorities, the bird is still hunted without control and this would be unfortunate as it is one of the country's national birds. This paper represents the preliminary look at this species in Tobago, West Indies.

The Cocrico belongs to the Subfamily Penelopinae and within the Genus: *Ortalis*. This genus has twelve species. The literature contains very limited information on this genus and the main focus is only on the Plain Chachalaca (*O. vertula Chestnut-winged chachalaca*), *O. garraula* and the Rufus-vented Chachalaca (*O. ruficauda*), and the Chaco Chachalaca (*O. canicollis*).

O. ruficauda are 53–61 cm long and 430–800 g in weight. Grayish buff belly becomes rufus on the undertail-coverts. The immature bird resembles the adult and the race differs in size, tone and general coloration, and color of tail tip (Fig. 1).

It feeds on, tender shoots and leaves foraging in groups of up to 50, but it is usually 4–20 in size.

The females lay in July in Colombia. In Tobago it is year round with the peak period being from March to June. They make their nests of twigs and leaves on trees but sometimes eggs are laid on the ground. They lay a clutch of 2–3 eggs sometimes 4 and incubation is 28 days.

The meat of the Rufus-vented Chachalaca is higher in protein content than most of the common and conventional table meats (Table 1).

METHOD

In November 1998, several visits were made to the Emperor Valley Zoo. Five farmers were visited on April 03 rd, 1999.

On August 15 th, 1999, a questionnaire was posted to another ten (10) Cocrico farmers in Tobago; only two of them responded.

Tobago have fifteen wildlife farmers who have had the experience of rearing the Cocrico in captivity.

RESULTS AND DISCUSSION

The Rufous-vented Chachalaca at the Emperor Valley Zoo (Table 2)

The birds at the Emperor Valley Zoo were housed in a cage approximately 4×4×4 meters. In the cage there was a nest box approximately 45×45×60 centimeters with a circular hole in the top half. The nest box was perched on a pedestal about 1 meter above the ground. Other structures in the cage were bars for the birds to perch on, and a stand for feeding (Fig. 2). There were nine birds on exhibit.

The birds were fed fruits and vegetables and fruits in season (cucumber, papaya, bananas, oranges, watermelon, lettuce), cracked corn and commercial pellets for growing broilers.

Although the Cocrico is endemic to Tobago, 25

Cocrico in Tobago

Fig. 1 The Cocrico on exhibit at the Emperor Valley Zoo Trinidad

Table 1 The protein and fat content of conventional animal meat diets

Meat source	Fat %	Protein %
beef	14.0	18.8
mutton and lamb	10.0	18.0
pork	47.0	11.2
poultry	10.0	18.2
duck	14.5	13.3
goose	13.3	13.9
Guinea fowl	6.4	23.1
codfish	0.3	17.6
turkey	11.8	13.1
cocrico	0.4	24.1

Table 2 Records of cocrico births at the Emperor Valley Zoo

Date	Notes
June 9 th 1988	3 eggs laid
June 6 th 1988	2 hatchlings born
July 1 st 1995	1 hatchlings born
November 12 th 1995	1 hatchlings born
January 15 th 1996	2 hatchlings born
March 30 th 1996	3 hatchlings born
May 30 th 1996	3 hatchlings born
July 20 th 1997	1 hatchlings born

kilometers away to the north east of Trinidad, there are no Cocricos found in the wild in Trinidad which is the closer island to the South American mainland where *Ortalis* species flourishes in the wild.

The Cocrico farmers of Tobago (Fig. 3)

The Central Ridge of Tobago is the oldest Forest Reserve in the western hemisphere (1765). All seven persons (Table 3) from whom the information was obtained also reared other forms of wildlife, and they were all males over 40 years of age. Rearing of the Cocrico was a hobby for them.

Fig. 2 Extrenal View of the Cocrico Exhibit at the Emperor Valley Zoo

In 1992 there were only 20 registered wildlife farmers, those who kept wildlife, in Trinidad [3], but by 1998 there were 115 registered wildlife farmers.

The literature reviewed was very limited on *Ortalis* sp. Only seventeen references were found on the Cocrico or Chachalacas [4], [5],

Development of intensive production models for wild species are considered urgent [6,7].

CONCLUSION

1] Some people in Tobago are interested and have been rearing the Cocrico in captivity.

2] In captivity this bird will lay and incubate their eggs, which will successfully hatch.

3] In captivity this bird did not demonstrate any seasonality of laying.

It is recommended that following work should be done.

(1)Detailed habitat analysis particularly of the Central Ridge of Tobago.

(2)Anatomical studies of this bird.

(3)Studies on the growth and nutritional requirements of this bird.

(4)Studies on reproduction and laying.

(5)Studies on phenotypic variability within the populations of birds in Tobago.

要 約

トリニダード・トバコ(ウエストインディズ)が英国から独立した1962年にコクリコは国鳥に指定されたが、1963年のハリケーンで森林の被害が甚大であったので森林の辺縁で棲みつくようになり農民から害鳥扱いされている。1980年の野生動物規制改定から保護鳥から害鳥に扱いが変わったため、コクリコ(ワキアカヒメシヤクケイ)の保存が危機的になってきている。コクリコの繁殖のために、トリニダードの動物園でのコクリコの飼育状態とトバコでコクリコを飼育している推定15名のうち5名(4ヶ所)に面接

Table 3 The cocrico farmers in Tobago

Farmer #	Maximum number of birds ever kept	Reproductive experience	Housing features	Other notes
1	10	twice birds laid 6 eggs laid but only 2 hatched one bird laid on ground	1.8 m×1.8 m×1.8 m - earth moor and gravel	- also reared agouti - birds fed cracked corn, papaya and sweet potato leaves
2	30	- birds laid in a hole in the ground - two chicks hatched	- pen size 3 m×3 m×2.5 m - gravel and earth floor	- also reared agouti and collard peccaries
3	one pair	- pair laid once	- bamboo pens 3 m×3 m×2.5 m	- also kept nine banded agouti and opossums
4	15	- two instances of laying eggs each - none of the eggs hatched - birds laid on the ground - birds ate the their eggs	- pen size 4 m×2.5 m×1.7 m	- also kept monkeys, a Curvier dwarf caimans, iguanas, parrots, an ocelot and salpinter
5	30	- birds laid on the ground - birds tended to lay in March and April	- pen size 2 m×0.7 m×0.7 m	- also kept parrots and monkeys - animals fed cracked corn and fruit
6	12 birds	- never observed any laying activity	- pen size 2 m×1.3 m×1.3 m - dirt and gravel floor with wood shavings	- also kept parrots, iguanas, agouti, snakes, quails and Japanese Game Birds - fed cracked corn and commercial chicken feed
7	7	- observed laying activity once - two eggs laid and both hatched but one chick died after one week	- pen size 7 m×3.3 m×3.3 m	- also kept parrots, parakeets, iguanas, salpinters/caimans, agouti, armadillo and collared peccaries - fed commercial poultry feed, cracked corn, dried coconut kernels, bananas and mangoes

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Fig. 3 The Distribution of the Cocrico Farmers in Tobago
Mason Hall (1,2,3), Bethel * (4,5), Speyside(6) and Roxborough(7)

し、質問状を送った 10 名中の 2 名から返答を得たことを併せて報告する。コクリコの肉は蛋白質(24.1%)に富み脂肪が少ない(0.4%)ので健康食品として注目されている。コクリコ飼育者はすべて 40 歳以上の男性で趣味として飼っている。この人達は、アグーチ、ペッカリー、イグアナ等他の野生動物も飼っている。飼育中のコクリコは、動物園でもトバコの 4ヶ所でも、地面や巣箱に産卵し、ふ化にも成功している。季節性はないようである。野生でコクリコが繁殖している南米本土に近いトリニダードで野生コクリコが見られず、トリニダードより北東 25 km 離れたトバコではコクリコが土着であるのは興味深い。

キーワード：コクリコ，トリニダード

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